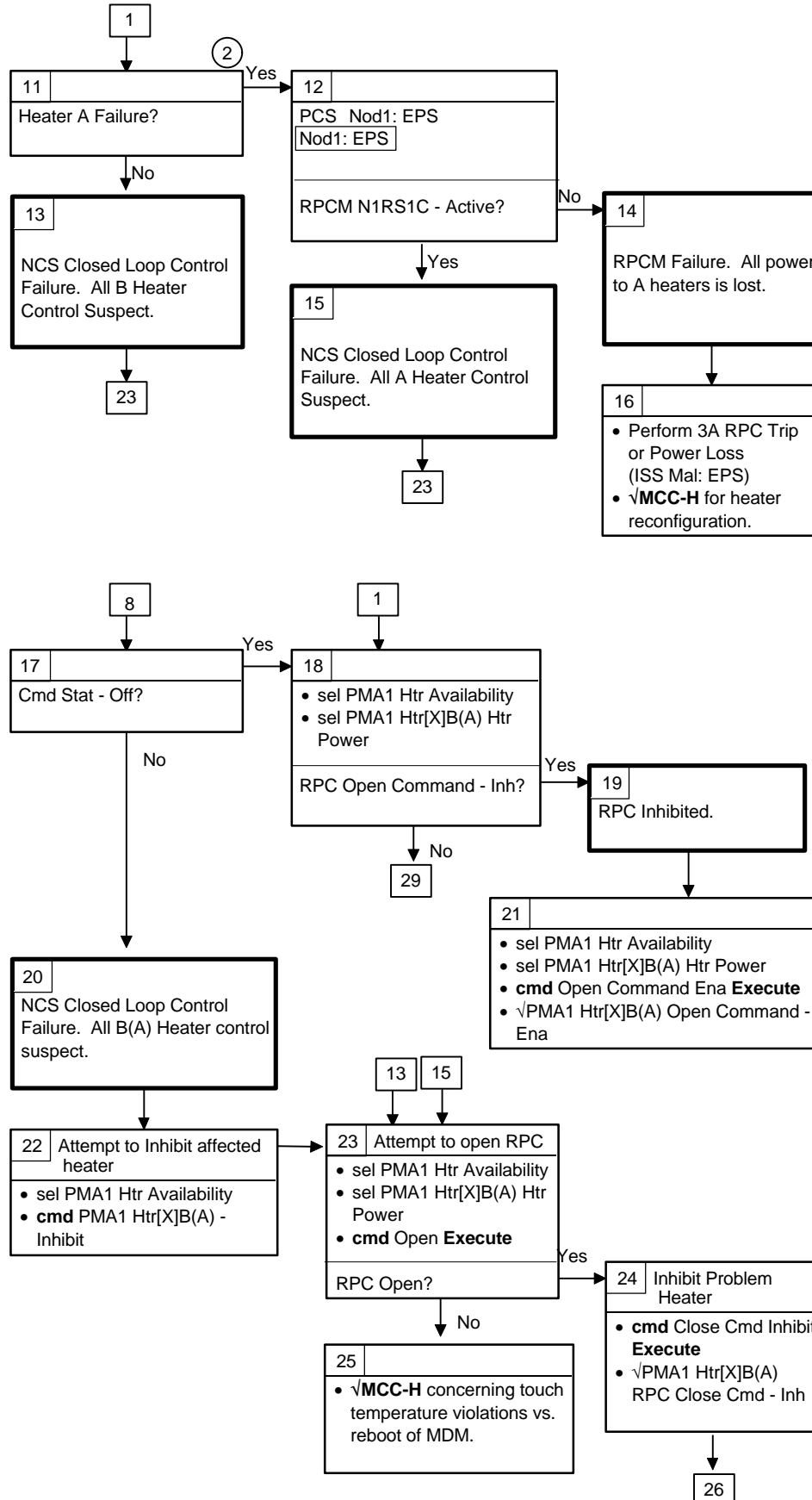


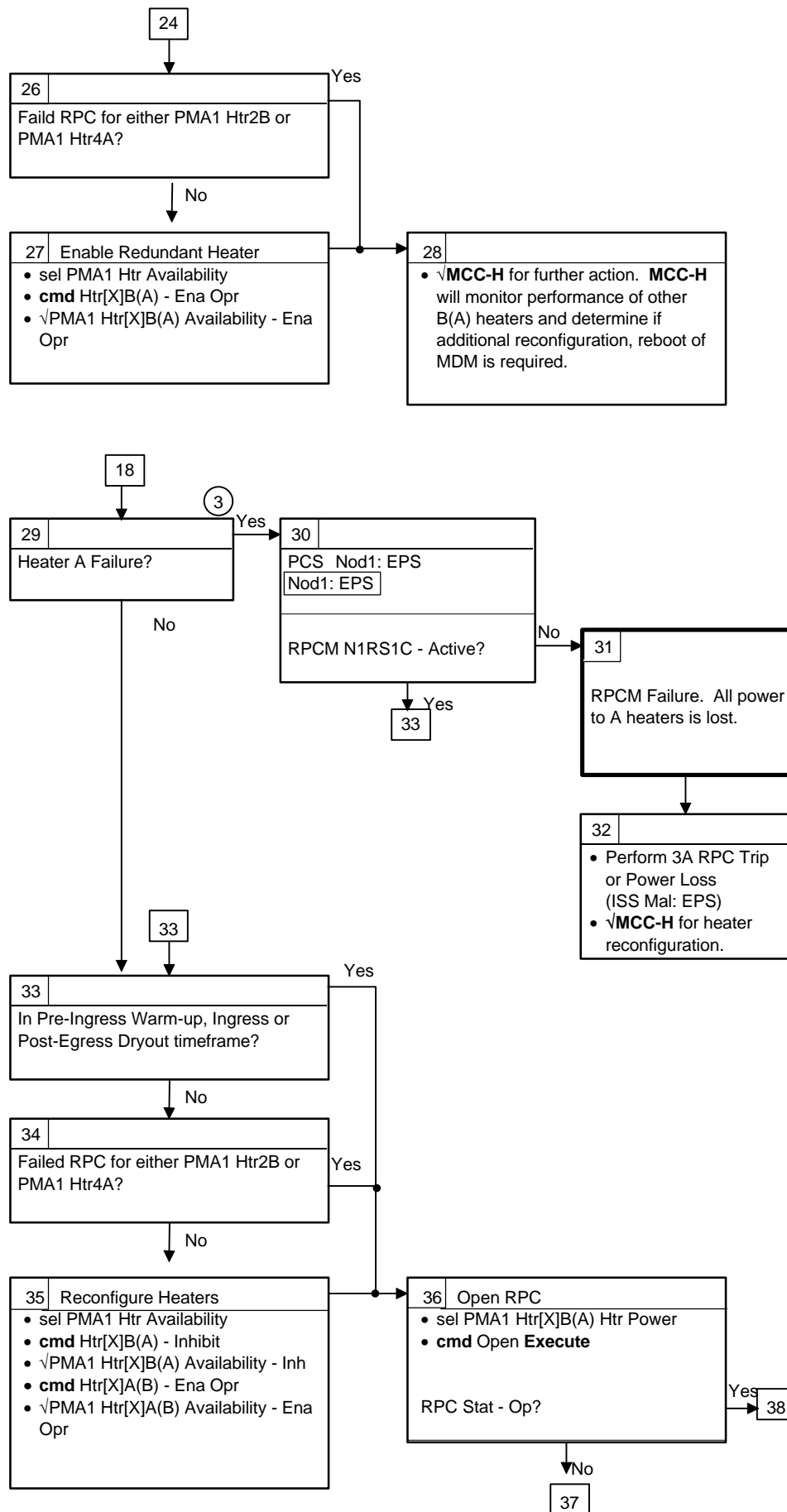
3A PMA1 SHELL HEATER FAILURE



②

The B heaters are connected to the same RPCM as MDM N1-2. The MDM Failure malfunction will be worked in that case. The A heaters are not connected to the same RPCM as MDM N1-1, therefore it is possible that the heater configuration problem could be detected before the RPCM failure.

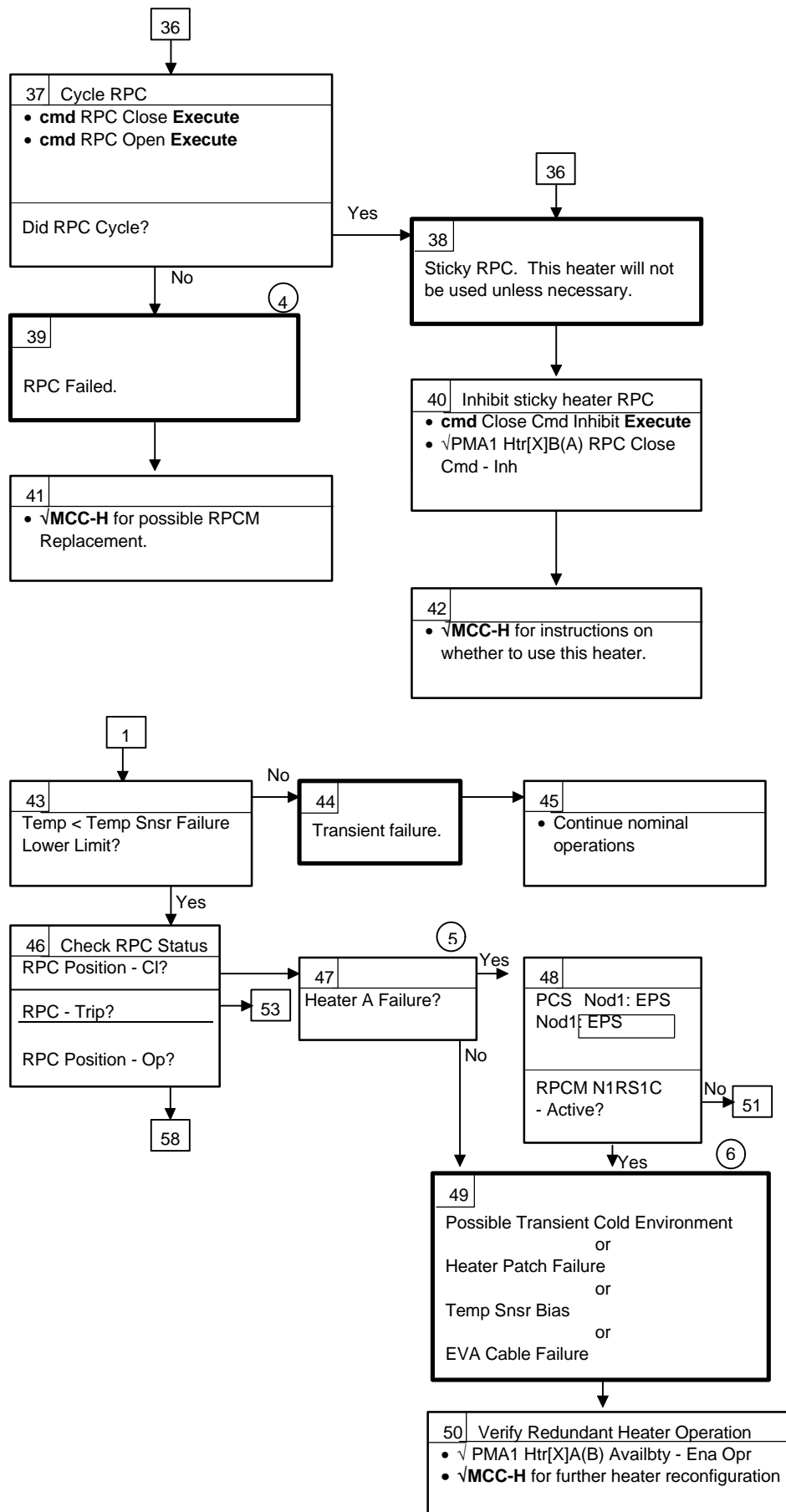
3A PMA1 SHELL HEATER FAILURE



③

The B heaters are connected to the same RPCM as MDM N1-2. The MDM Failure malfunction will be worked in that case. The A heaters are not connected to the same RPCM as MDM N1-1, therefore it is possible that the heater configuration problem could be detected before the RPCM failure.

3A PMA1 SHELL HEATER FAILURE

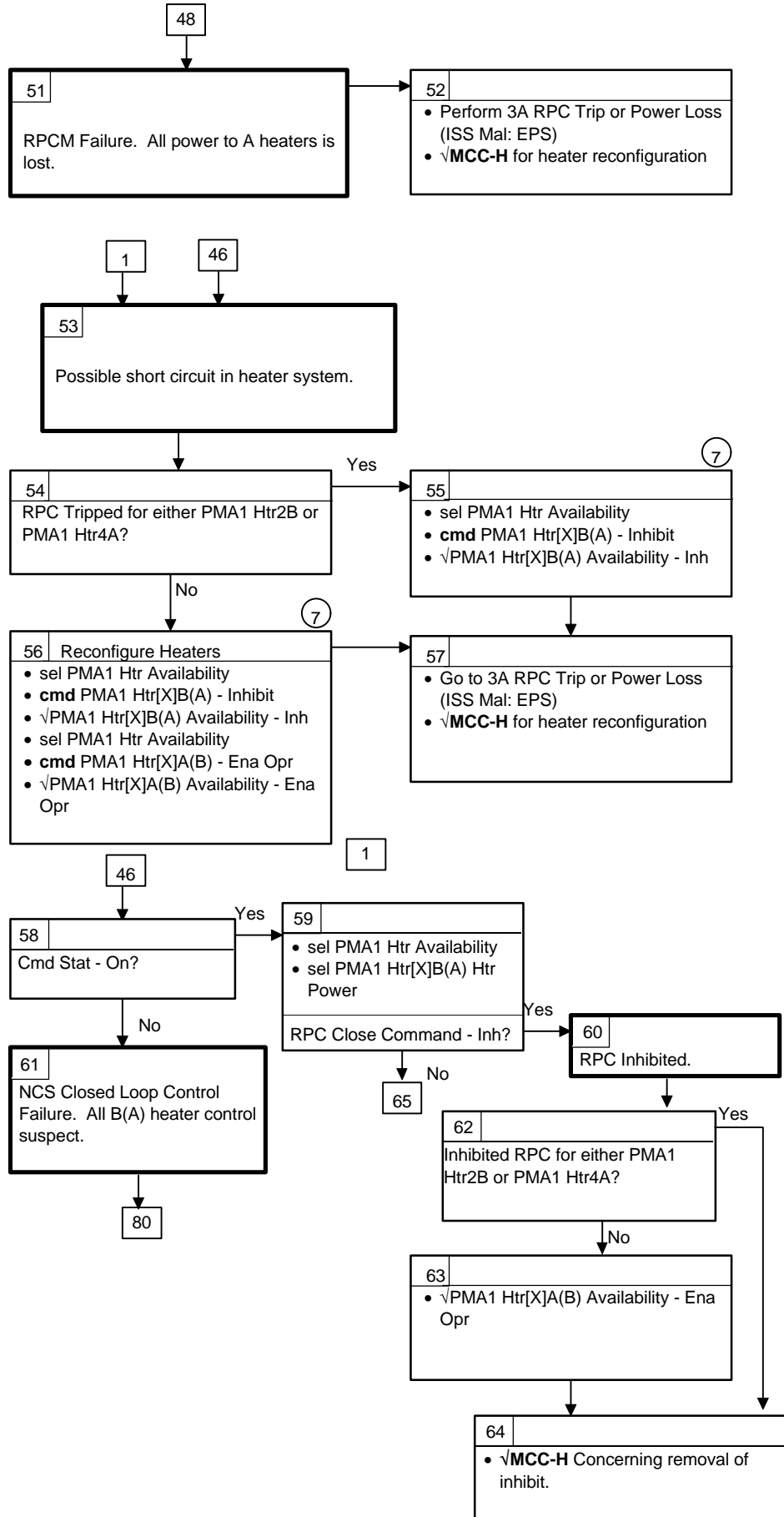


④ **MCC-H** will evaluate the possibility of touch temperature violations and consequences of leaving the heater on.

⑤ The B Heaters are connected to the same RPCM as MDM N1-2. The MDM failure malfunction will be worked in that case. The A heaters are not connected to the same RPCM as MDM N1-2, therefore it is possible that the heater configuration problem could be detected before the RPCM failure.

⑥ A transient cold environment could require both B and A heaters to keep temperatures within limits. A heater pad debonding failure could also be the culprit in this case. If all B(A) temperatures do not appear to be rising properly, the failure could be in the EVA cable/connectors P672/J672 (B heaters) or P666/J666 (A heaters).

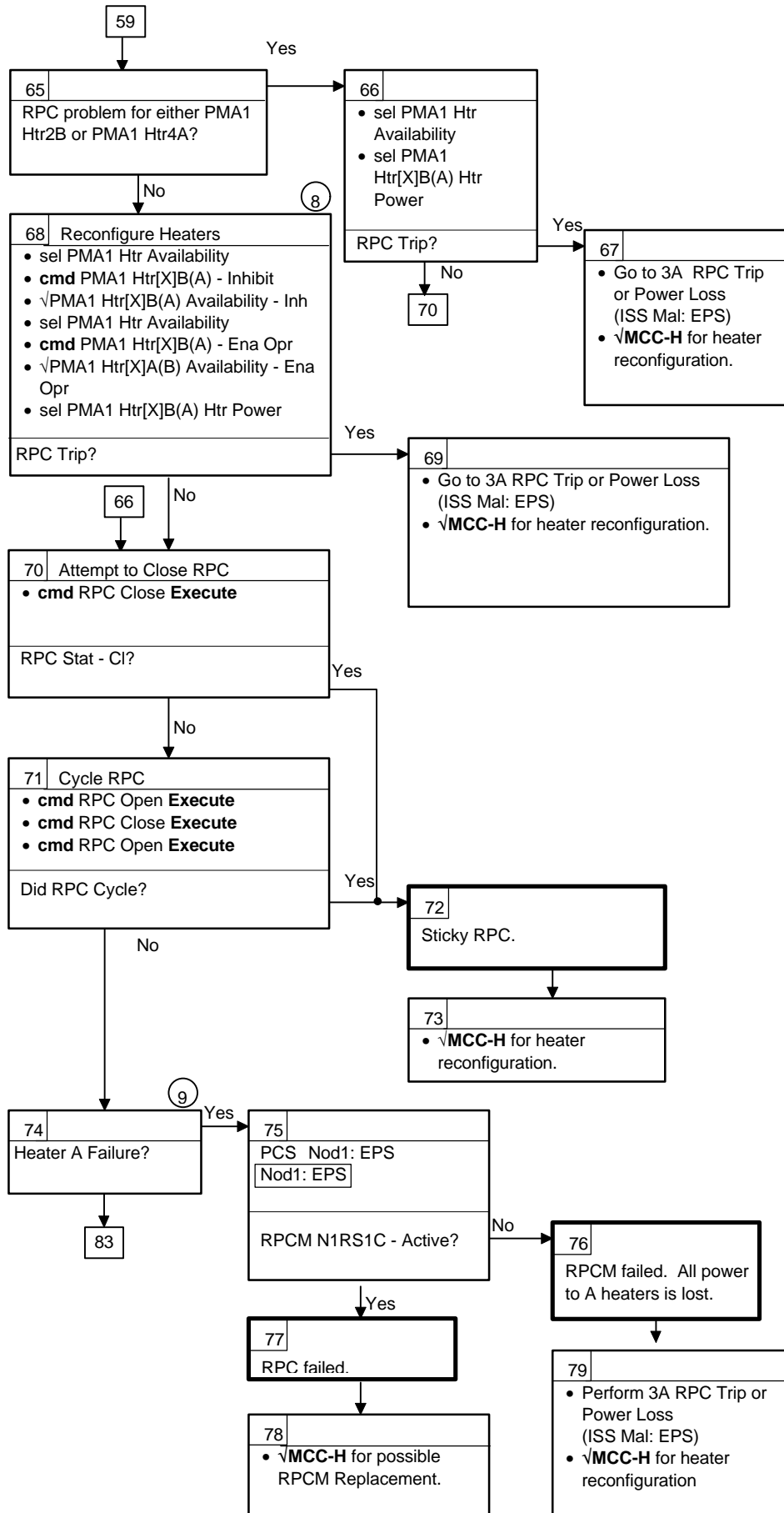
3A PMA1 SHELL HEATER FAILURE



7

Since the RPC tripped, it will not be used again unless necessary.

3A PMA1 SHELL HEATER FAILURE



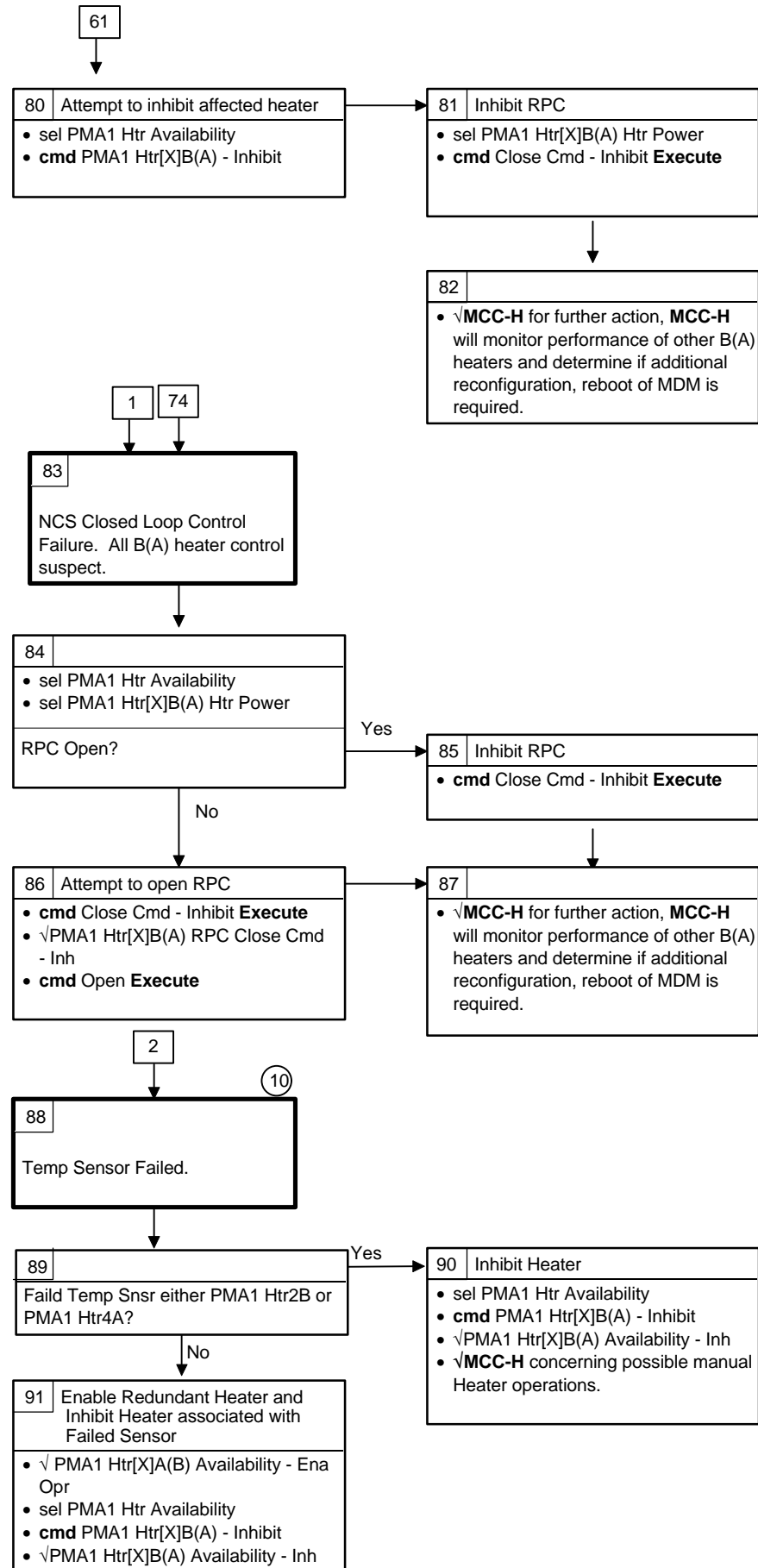
⑧

Since the shell is in a cold condition, the back-up heater should be enabled.

⑨

The B heaters are connected to the same RPCM as MDM N1-2. The MDM failure malfunction will be worked in that case. The A heaters are not connected to the same RPCM as MDM N1-1, therefore it is possible that the heater configuration problem could be detected before the RPCM failure.

3A PMA1 SHELL HEATER FAILURE



⑩

Temperature sensor has failed its range check. Temperature is either higher than + 400°C or lower than - 350°C. Software will command the heater off (default state).